

REMARKS

The present application has been reviewed in light of the Office Action mailed June 17, 2009. Claims 31-60 remain pending in the application. By the present amendment, Applicants have amended claim 31, and added claims 61-64. No new matter has been added by this amendment. Entry of the present amendment prior to examination of the present application is respectfully requested.

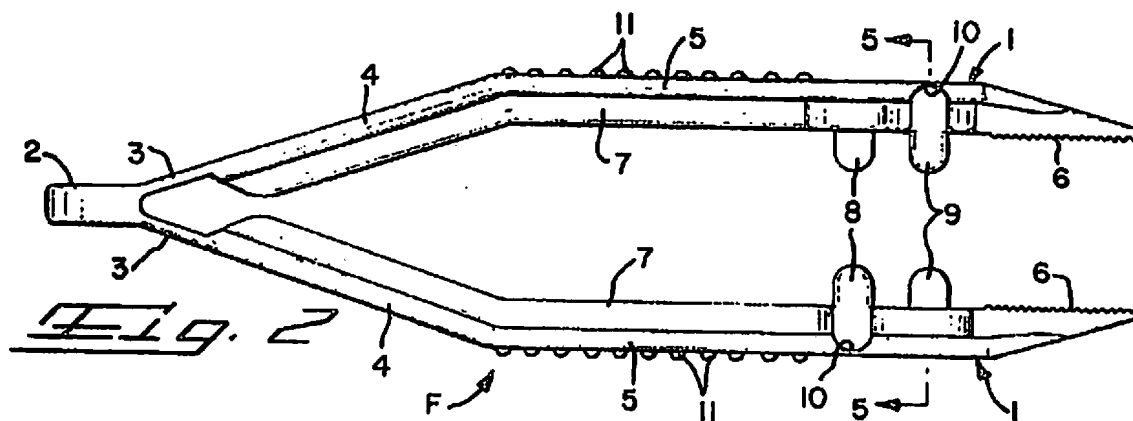
Claims 31-37, 41, 43 and 44 were rejected under 35 U.S.C. 103(a), as being obvious over U.S. Patent No. 3,653,389 to Shannon (hereinafter, "Shannon") in view of U.S. Patent No. 3,363,628 to Wood (hereinafter, "Wood"). Applicant respectfully submits that Shannon in view of Wood fails to disclose each and every element recited in independent claim 31.

Applicant respectfully submits that independent claim 31, as amended herein, is allowable over Shannon in view of Wood because Shannon in view of Wood fails to disclose or suggest all the elements of independent claim 31.

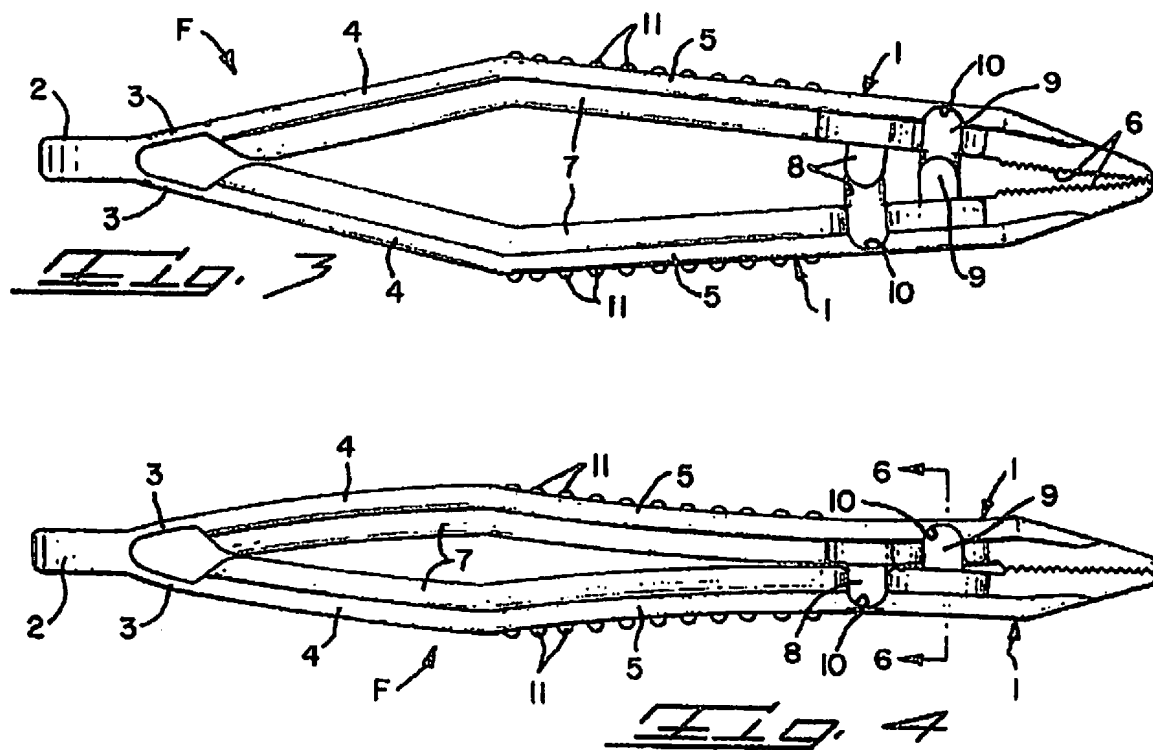
Claim 31 recites a surgical clip applying apparatus including, *inter alia*, an inter-leg engaging member extending from each of the first and second legs and including a distal end engageable with the other of the first and second legs, wherein the distal end of each inter-leg engaging member is at all times at least partially engaged with the other of the first and second legs.

According to the Examiner, Shannon discloses the invention substantially as claimed, except for the jaws defining a channel oriented substantially along a respective longitudinal axis thereof. Specifically, with reference to the figure reproduced below, the Examiner states that Shannon

discloses a surgical apparatus including a handle portion (2 and 3 combined) including a moveable handle (3) and a stationary hand grip (2), an elongated body portion (4) and a jaw blade (5 and 6 combined) including a first leg (5) and a second leg (5), each leg having a jaw (at 6) integrally connected thereto. The Examiner relies on Wood to teach the modification of the jaw member to include a channel oriented substantially along a respective longitudinal axis thereof.



With the above understanding of the apparatus of Shannon, Shannon fails to disclose that “the distal end of each inter-leg engaging member is at all times at least partially engaged with the other of the first and second legs,” as recited in independent claim 31. Instead, legs (5) of Shannon each include a pair of lugs 8 and 9 extending therefrom. As seen in FIG. 2 of Shannon, a distal end of alignment lugs 8 and 9 are not in contact with the opposite leg when the forceps are in an open position. As such, the legs 5 of the forceps of Shannon may become mis-aligned during an initial closure thereof and only engage the opposite leg 5 upon substantial or complete closure, as seen in FIGS. 3 and 4 (reproduced below).



Applicant respectfully submits that Wood fails to cure the deficiencies of Shannon in that Wood also fails to show, teach or disclose “the distal end of each inter-leg engaging member is at all times at least partially engaged with the other of the first and second legs,” as recited in independent claim 31. Rather, Wood merely discloses or shows a pair of jaws 19 and a clip 25 formable by the pair of jaws 19.

Accordingly, in view of the foregoing, Applicant respectfully submits that independent claim 31 is not obvious under 35 U.S.C. § 103(a) over Shannon in view of Wood. Since claims 32-37, 41, 43 and 44 depend, directly or indirectly, from claim 31, Applicant respectfully submits that claims 32-37, 41, 43 and 44, are also patentable over Shannon in view of Wood.

Claims 45-50, 52 and 56-59 were rejected under 35 U.S.C. 103(a), as being obvious over Shannon in view of U.S. Patent No. 6,066,174 to Farris (hereinafter, "Farris) and further in view of Wood. Applicant respectfully submits that Shannon in view of Farris and further in view of Wood fails to disclose each and every element recited in independent claims 45, 52 and 56.

Claim 45 recites a surgical clip applying apparatus including, *inter alia*, a handle portion and an elongated body portion rotatably mounted to and extending from the handle portion; and claims 52 and 56 recite a surgical clip applier including, *inter alia*, an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

As discussed above, according to the Examiner, Shannon discloses a surgical apparatus substantially as claimed and relies on Wood to teach the modification of the jaw member to include a channel oriented substantially along a respective longitudinal axis thereof. Additionally, the Examiner relies on Farris to teach an elongated body portion rotatably mounted to and extending from the handle portion and an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

According to the Examiner, with reference to FIGS. 9 and 10 of Farris reproduced below, Farris discloses an apparatus including a handle portion including a moveable handle (55), a jaw blade (58) and an elongated body portion (160) rotatably mounted to and extending from the handle portion and including a rotating collar (knurled portion of 160) for rotating the body portion relative to the handle portion.

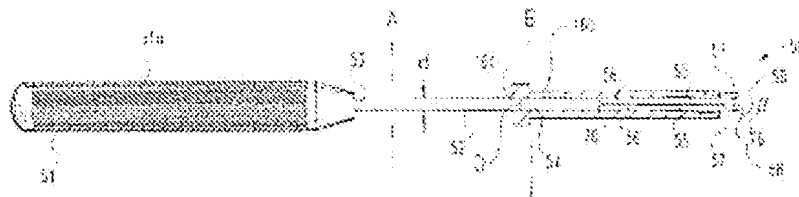


Fig. 9

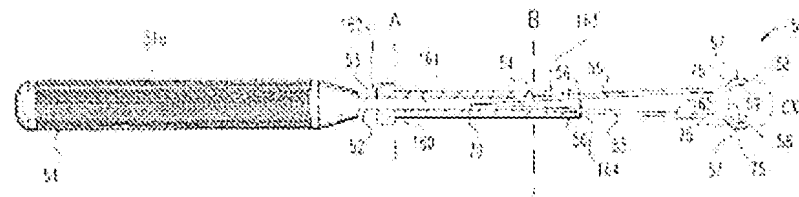


Fig. 10

Instead, with reference to FIG. 2 of Shannon reproduced above, Shannon discloses disposable forceps F which are provided with arms 1 which are connected together at inner ends by a connecting section 2. Each arm 1 is provided with a hinge section 3, an inclined section 4, a straight section 5 and article-engaging teeth 6. Ribs are disposed along the outer surfaces of straight sections 5 to provide engaging areas for an operator to normally engage the forceps between the thumb and forefinger of an operator so that the ribbed area between lugs 8 and the junctions between section 4 and 5 define grasping areas for normally grasping the forceps to operate the same.

With reference to FIGS. 9 and 10, reproduced above, Farris discloses an inserter 50 including a handle 51 and a shaft 52. A proximal end 53 of shaft 52 extends from handle 51 and a distal end 54 of shaft 52 includes a pair of jaws 55. A sleeve 160 is slidably mounted on shaft 52 and is slidable between a first position "A" adjacent handle 51 to a second engaging position "B" spaced

from first position "A" in a location between first position "A" and free ends 57 of jaws 55. Farris does not disclose that sleeve 160 is rotatably mounted on shaft 52. Further, it is not readily apparent what purpose rotatably mounting sleeve 160 on shaft 52 would serve because jaws 55 are fixedly secured to handle 51 and not to sleeve 160. Therefore, rotation of sleeve 160 would not rotate jaws 55 or an implant held therein, and thus, there is no motivation or suggestion to configure sleeve 160 to be rotatably mounted to shaft 52.

Contrary to the Examiner's assertion, it would not have been obvious to modify inclined section 4 of the forceps of Shannon to include slidable sleeve 160 of Farris. A person of ordinary skill in the art of disposable forceps for use to remove sutures, handle dressings and hold cotton to swab areas of a patient would not look to a device for inserting vertebral implants, and therefore, the references are not properly combined. Assuming arguendo, the combination of Shannon and Farris is proper, the addition of a sleeve to the forceps of Shannon would not allow the forceps to be used in a minimally-invasive procedure, as proffered by the Examiner. Instead, the modification would render the forceps of Shannon inoperable for their intended purpose. With reference to FIGS. 3 and 4 of Shannon, reproduced above, actuation of forceps F requires engagement of straight sections 5 between the thumb and forefinger of an operator. Modifying the either or both of inclined sections 4 and or straight sections 5 of forceps F to include sleeve 160 of Farris would prevent engagement of straight sections 5 by a user, thereby preventing the complete engagement of article-engaging teeth 6. Furthermore, the inclusion of a rotatable body portion with forceps F would serve no purpose as forceps F are monolithically formed and no portion thereof is rotatable relative to another portion thereof.

Accordingly, in view of the foregoing, Applicant respectfully submits that independent claims 45, 52 and 56 are not obvious under 35 U.S.C. § 103(a) over Shannon in view of Farris, and further in view of Wood. Since claims 44-50 depend, directly or indirectly, from claim 45, and claims 57-59 depend, directly or indirectly, from claim 56, Applicant respectfully submits that claims 32-37, 41, 43 and 44, are also patentable over Shannon in view of Wood.

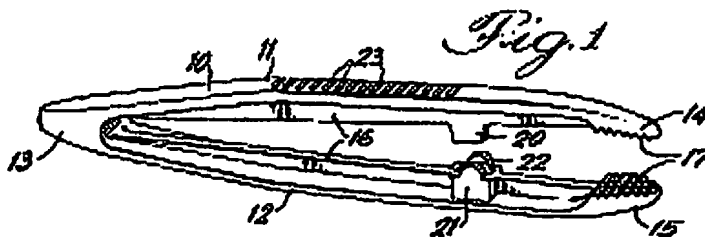
Claims 31, 38 and 42 were rejected under 35 U.S.C. 103(a), as being obvious over U.S. Patent No. 3,140,715 to Whitton, Jr. et al. (hereinafter, "Whitton, Jr.") in view of Wood. Applicant respectfully submits that Whitton, Jr. in view of Wood fails to disclose each and every element recited in independent claim 31.

Applicant respectfully submits that independent claim 31, as amended herein, is allowable over Whitton, Jr. in view of Wood because Whitton, Jr. in view of Wood fails to disclose or suggest all the elements of independent claim 31.

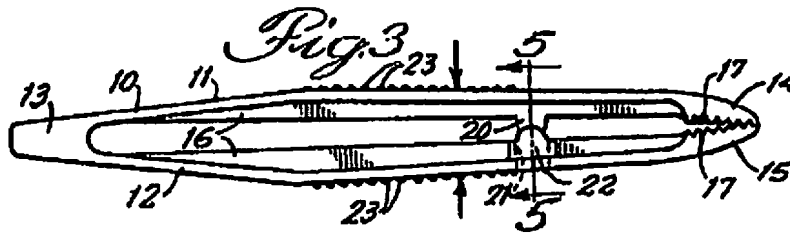
As stated above, independent claim 31 recites a surgical clip applying apparatus including, *inter alia*, an inter-leg engaging member extending from each of the first and second legs and including a distal end engageable with the other of the first and second legs, wherein the distal end of each inter-leg engaging member is at all times at least partially engaged with the other of the first and second legs.

According to the Examiner, Whitton Jr. discloses the invention substantially as claimed, except for the jaws defining a channel oriented substantially along a respective longitudinal axis thereof. Specifically, with reference to FIG. 1, reproduced below, the Examiner states that Whitton,

Jr. discloses a surgical apparatus including a handle portion (13 and proximal portions of 11 and 12 combined) including a movable handle (proximal, inclined portions of 11 and 12) and a stationary hand grip (13), an elongated body portion (element 16), a jaw blade including a first leg (distal portion of 11) and a second leg (distal portion of 12), each leg having a jaw (14, 15). The Examiner relies on Wood to teach the modification of the jaw members include a channel oriented substantially along a respective longitudinal axis thereof.



With the above understanding of the apparatus of Whitton, Jr., Whitton, Jr. fails to disclose that "the distal end of each inter-leg engaging member is at all times at least partially engaged with the other of the first and second legs," as recited in independent claim 31. Instead, the first and second legs 11, 12 of handle portion 13 of Whitton, Jr. a projection 20 and a socket 21, respectively. As seen in FIG. 1 of Whitton, Jr., a distal end of projection 20 is not in engagement with socket 21 when the forceps are in an open position. As such, the legs 11, 12 of the forceps of Whitton, Jr. may become mis-aligned during an initial closure thereof and only engage one another upon substantial or complete closure, as seen in FIG. 3. (reproduced below).



Accordingly, in view of the foregoing, Applicant respectfully submits that independent claim 31 is not obvious under 35 U.S.C. § 103(a) over Whitton in view of Wood. Since claims 38 and 42 depend, directly or indirectly, from claim 31, Applicant respectfully submits that claims 38 and 42, are also patentable over Whitton, Jr. in view of Wood.

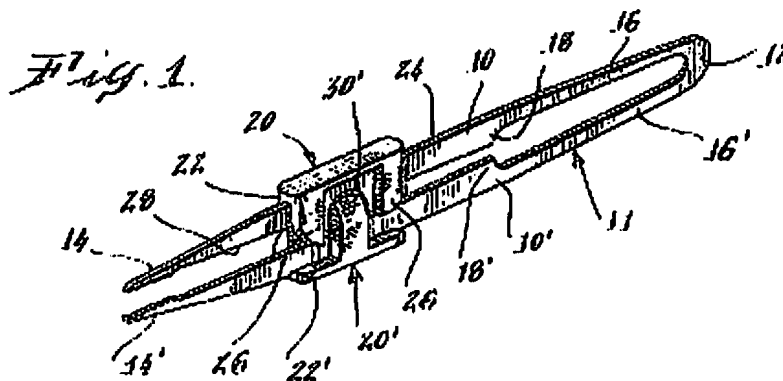
Claims 31, 33, 39 and 40 were rejected under 35 U.S.C. § 103(a), as being obvious over U.S. Patent No. 4,318,313 to Tartaglia (hereinafter, "Tartaglia") in view of Wood. Applicant respectfully submits that independent claim 31, as amended herein, is allowable over Tartaglia in view of Wood because Tartaglia in view of Wood fails to disclose or suggest all the elements of independent claim 31.

As stated above, independent claim 31 recites a surgical clip applying apparatus including, *inter alia*, a first leg and a second leg, each leg having a jaw integrally connected thereto and

extending distally therefrom, each jaw defining a channel oriented substantially along a respective longitudinal axis thereof, wherein the channels are configured to receive a surgical clip therebetween, wherein each jaw is oriented at an angle with respect to a plane defined by the first and second leg.

Applicant respectfully submits that independent claim 31, as amended herein is allowable over Tartaglia in view of Wood because Tartaglia in view of Wood fails to disclose or suggest all the elements of independent claim 31.

According to the Examiner, Tartaglia discloses the invention substantially as claimed, except for the jaws defining a channel oriented substantially along a respective longitudinal axis thereof. Specifically, with reference to FIG. 1, reproduced below, the Examiner states that Tartaglia discloses a surgical apparatus including a handle portion (12 and 16 and 16' combined) including a movable handle (16 and 16') and a stationary hand grip (12), an elongated body portion (18, 18'), a jaw blade including a first leg (10) and a second leg (10'), each leg having a jaw (14 or 14'). The Examiner relies on Wood to teach the modification of the jaw members include a channel oriented substantially along a respective longitudinal axis thereof.



With the above understanding of the apparatus of Tartaglia, Tartaglia fails to disclose a first leg and a second leg, each leg having a jaw integrally connected thereto and extending distally therefrom, each jaw defining a channel oriented substantially along a respective longitudinal axis thereof, wherein the channels are configured to receive a surgical clip therebetween, wherein each jaw is oriented at an angle with respect to a plane defined by the first and second leg,” as recited in independent claim 31. Instead, jaws 14 and 14’ are disposed in the same plane and the plane defined by legs (10, 10’).

Applicant respectfully submits that Wood fails to cure the deficiencies of Tartaglia in that Wood also fails to show, teach or disclose each jaw being oriented at an angle with respect to a plane defined by the first and second leg, as recited in independent claim 31. Rather, Wood merely discloses or shows a pair of jaws 19 and a clip 25 formable by the pair of jaws 19.

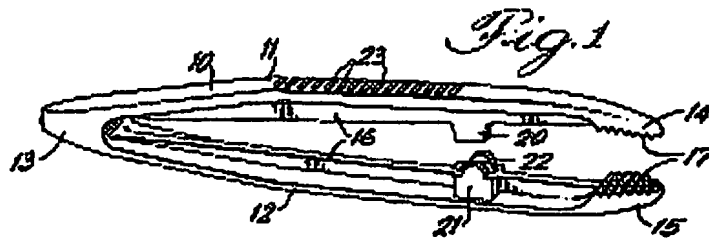
Accordingly, in view of the foregoing, Applicant respectfully submits that independent claim 31 is not patentable under 35 U.S.C. § 103(a) over Tartaglia in view of Wood. Since claims 38 and 42 depend, directly or indirectly, from claim 31, Applicant respectfully submits that claims 38 and 42, are also patentable over Tartaglia in view of Wood.

Claims 45, 47, 51, 56, 57 and 60 were rejected under 35 U.S.C. 103(a), as being unpatentable over Whitton, Jr. in view of Farris, and further in view of Wood. Applicant respectfully submits that Whitton, Jr. in view of Farris and further in view of Wood fails to disclose each and every element recited in independent claims 45 and 56.

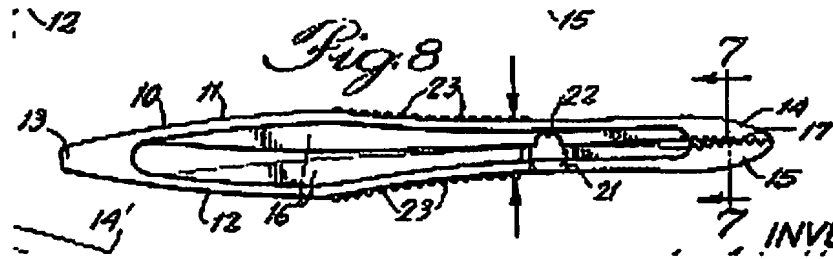
Claim 45 recites a surgical clip applying apparatus including, *inter alia*, a handle portion and an elongated body portion rotatably mounted to and extending from the handle portion; and claim 56 recites a surgical clip applier including, *inter alia*, an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

As discussed above, according to the Examiner, Whitton, Jr. discloses a surgical apparatus substantially as claimed. As previously noted, the Examiner relies on Wood to teach the modification of the jaw member to include a channel oriented substantially along a respective longitudinal axis thereof. Additionally, the Examiner relies on Farris to teach an elongated body portion rotatably mounted to and extending from the handle portion and an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

Instead, with reference to FIG. 1 of Whitton, Jr. reproduced below, Whitton Jr. discloses forceps 10 which include upper and lower arms 11 and 12. A pair of corresponding ends of the arms are secured together by a connecting portion 13 and the opposite ends of the arms are provided with jaws 14, 15. When the tips of the jaws come into contact, the remaining portions of those jaws, as well as the longitudinal ribs 16 of arms 11 and 12, are still spaced a substantial distance apart. It is only upon the application of increased force sufficient to cause a bending of the reinforcing ribs 16 that the ribs of the respective jaws are urged into contact and the teeth of the upper and lower jaws fully mesh.



Contrary to the Examiner's assertion, it would not have been obvious to modify the elongated portion of the forceps of Whitton, Jr. to include slidable sleeve 160 of Farris. A person of ordinary skill in the art of plastic forceps would not look to a device for inserting vertebral implants, therefore the references are not properly combined. Assuming arguendo, the combination of Whitton, Jr. and Farris is proper the addition of a sleeve to the forceps of Whitton, Jr. would not allow the forceps to be used in a minimally-invasive procedure, as proffered by the Examiner. Instead, the modification would render the forceps of Whitton, Jr. inoperable for their intended purpose. As discussed above, and with reference to FIG. 8 of Whitton, Jr., reproduced below, it is only upon the application of increased force sufficient to cause a bending of the reinforcing ribs 16 that the ribs of respective arms 11, 12 are urged into contact and teeth 17 of upper and lower jaws 14, 15 fully mesh. Modifying arms 11, 12 of forceps 10 to include sleeve 160 of Farris would prevent proper engagement of arms 11, 12 by a user, thereby preventing the complete engagement of teeth 17. Furthermore, the inclusion of a rotatable body portion with forceps 10 would serve no purpose as forceps 10 are monolithically formed and no portion thereof is rotatable relative to any other portion thereof.



Accordingly, in view of the foregoing, Applicant respectfully submits that independent claims 45 and 56 are not obvious under 35 U.S.C. § 103(a) over Whitton, Jr. in view of Farris, and further in view of Wood. Since claims 47 and 51 depend, directly or indirectly, from claim 45, and claims 57 and 60 depend, directly or indirectly, from claim 56, Applicant respectfully submits that claims 47, 51, 57 and 60, are also patentable over Whitton, Jr. in view of Wood.

Claims 52-54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tartaglia in view of Farris and further in view of Wood. Applicant respectfully submits that Tartaglia in view of Farris and further in view of Wood fails to disclose each and every element recited in independent claim 52.

Claim 52 recites an apparatus for applying surgical fasteners or clips including, *inter alia*, a body portion extending from a handle portion and including a rotating collar for rotating the body portion relative to the handle portion.

As discussed above, according to the Examiner, Tartaglia discloses a surgical apparatus substantially as claimed. As previously noted, the Examiner relies on Wood to teach the modification of the jaw member to include a channel oriented substantially along a respective longitudinal axis thereof. Additionally, the Examiner relies on Farris to teach an elongated body

portion rotatably mounted to and extending from the handle portion and an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

Instead, with reference to FIG. 1 of Tartaglia reproduced hereinbelow, Tartaglia discloses a forceps including a pair of elongated arms 10, 10' integral with an end section 12. Arms 10, 10' and their integral end section 12 form an elongated U-shaped tweezer-like spring element 11. In order to facilitate manipulation of the forceps, finger pieces 20, 20' are mounted on the mid-portions 18, 18' of arms 10, 10' at a suitable distance rearward of their tips 14, 14'.

Contrary to the Examiner's assertion, it would not have been obvious to modify the elongated portion of the forceps of Tartaglia to include slidable sleeve 160 of Farris. A person of ordinary skill in the art of tweezer forceps would not look to a device for inserting vertebral implants, therefore the references are not properly combined. Assuming arguendo, the combination of Tartaglia and Farris is proper, the addition of a sleeve to the tweezer forceps of Tartaglia would not allow the forceps to be used in a minimally-invasive procedure, as proffered by the Examiner. Instead, the modification would render the forceps of Tartaglia inoperable for their intended purpose. Modifying arms 10, 10' of forceps to include sleeve 160 of Farris would prevent proper engagement of finger pieces 20, 20' by a user, thereby preventing the engagement of the jaw members. Furthermore, the inclusion of a rotatable body portion with the tweezer forceps would serve no purpose as the tweezer forceps there is no portion thereof that is rotatable relative to any other portion thereof.

Claim 55 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood in view of Shannon and further in view of Farris. Applicant respectfully submits that independent claim 55 is allowable over Wood in view of Shannon and further in view of Farris because Wood in view of Shannon and Farris fails to disclose or suggest all the elements of independent claim 55.

Independent claim 55 recites a method for applying surgical clips and performing blunt dissection of tissue including, *inter alia*, the step of providing a surgical clip applier for applying surgical clips, which surgical clip applier includes a handle portion including a moveable handle, an elongated body portion rotatable mounted to and extending from the handle portion, and a jaw blade supported on a distal end of the elongated body and being selectively closed upon an actuation of the moveable handle.

As discussed above, none of Wood, Shannon or Farris, individually or in any proper combination, show, teach or disclose a clip applier including, *inter alia*, an elongated body portion rotatably mounted to and extending from the handle portion. Accordingly, in view of the foregoing, Applicant respectfully submits that claim 55 is not obvious under 35 U.S.C. § 103(a) over Wood in view of Shannon and further in view of Farris.

By the present amendment, Applicant has added new claims 61-64. Claim 61 depends from claim 45, claim 62 depends from claim 52, claim 63 depends from claim 55 and claim 64 depends from claim 56. For at least the reasons claims 45, 52, 55 and 56 are patentable, claims 61-64 are also patentable.

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Docket: 2787 (203-3103 PCT US)
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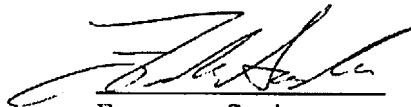
**Response to Office Action
mailed June 17, 2009**

In view of the foregoing amendments and remarks, Applicant respectfully submits that each of the rejections of the claims in the present Office Action has been overcome and pending claims 31-64 are believed to be in condition for allowance.

Should the Examiner believe that a telephone interview may facilitate prosecution of this application, the Examiner is respectfully requested to telephone Applicants' undersigned representative at the number indicated below.

In view of the foregoing amendments and remarks, reconsideration of the application and allowance of all pending claims is earnestly solicited.

Respectfully submitted,



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